Concrete Construction Safety
OSHA 29 CFR 1926 Subpart Q

Circle Safety & Health Consultants, LLC

Many cements contain substances that can be **HAZARDOUS**, including:

• Silica • Lime • Gypsum • Nickel • Cobalt • Chromium compounds

Respiratory Hazards

- Chronic bronchitis
- Silicosis
- Cancer— from the small amounts of chromium compounds found in some cements

Other Hazards

- Getting cement dust or wet cement on your skin can cause burns, rashes, and other kinds of skin irritation
- Long periods of exposure can cause some workers to slowly become allergic to cement
- Cement dust and wet cement can irritate eyes

Precautions

- Don't get wet or dry cement on your skin or in your eyes. If you do, immediately wash it off with a lot of water.
- Wear goggles, or safety glasses with side shields, to protect yourself from splashes.
- Wear boots and other protective clothing if necessary
- Wear gloves. Use a type which are impermeable. Leather or cloth work gloves won't protect you

Silicosis

Concrete and masonry products contain silica sand and rock containing silica. Since these products are primary materials for construction, construction workers may be easily exposed to respirable crystalline silica.

Symptoms

- Acute silicosis can occur after a few weeks of very high exposure (for example, in sandblasters). Symptoms are shortness of breath, coughing, fever, and weight loss.
- Chronic silicosis is rarely seen in workers with less than ten years of exposure. It permanently damages your lungs.

Hazardous Activities

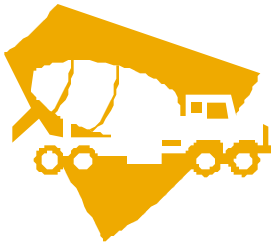
- Abrasive blasting of concrete (regardless of abrasive used)
- Sawing, hammering, drilling, grinding, and chipping of concrete or masonry
- Demolition of concrete and masonry structures
- Dry sweeping or pressurized air blowing of concrete, rock, or sand dust

Read the **Material Safety Data Sheet** (MSDS) for the product. MSDSs are required by law. They'll tell you the ingredients and possible health hazards.

Precautions

- Stay out of dusty areas if you can
- Wet down the work to keep dust out of the air
- Use power tools with HEPA filters when you're cutting or drilling concrete
- Use a special HEPA vacuum to clean up dust, not dry sweeping
- Wear a respirator with HEPA cartridges if there's a lot of dust in the air.
- No dry cutting of concrete
- No dry sweeping of cement dust
- Do not use silica sand or other substances containing more than 1% crystalline silica as abrasive blasting materials. Substitute less hazardous materials
- Use engineering controls and containment methods such as blast-cleaning machines and cabinets, wet drilling, or wet sawing of silica-containing materials to control the hazard and protect adjacent workers from exposure
- Use adequate respiratory protection when source controls cannot keep silica exposures below the NIOSH REL
- Post warning signs to mark the boundaries of work areas contaminated with respirable crystalline silica
- To control dust, use saws that provide water to the blade when sawing concrete or masonry
- Wear disposable or washable protective clothes at the worksite

When concrete is cut, drilled, or broken up, the dust has all the same hazards as the dust from new cement. The only difference is that, since it isn't a new product, there will be no label or MSDS to check.



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